PMCP

U.S. DEPARTMENT OF ENERGY
WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Environmental Management/Bechtel Jacobs Company LLC	01/09/2004	DE-AC05-98OR22700

4. WBS ELEMENT CODE	5. WBS ELEMENT TITLE
1.12.05.01.02.02	PORTS Quadrant II Corrective Actions

6. INDEX LINE NO.	7. REVISION NO. AND AUTHORIZATION	8. DATE
	N/A	N/A

9. APPROVED CHANGES
N/A

10. SYSTEM DESIGN DESCRIPTION	11. BUDGET AND REPORTING NUMBER

12. ELEMENT TASK DESCRIPTION

WBS GRAPHIC

See attachment.

INTRODUCTION

The U.S. Department of Energy (DOE) Environmental Restoration Program at the Portsmouth Gaseous Diffusion Plant (PORTS) is the subject of two enforcement actions. The State of Ohio issued a Consent Decree (CD) in August 1989, and the United States Environmental Protection Agency (USEPA) Region V issued an Administrative Order by Consent (AOC), under the authority of Section 3008(h) of the Resource Conservation and Recovery Act (RCRA) in September 1989 (amended in 1994 and 1997).

Quadrant II is located in the northeast portion of the plantsite and consists of approximately 325 acres of the 3,714-acre DOE reservation. The RCRA Facility Investigation and Corrective Measures Study for Quadrant II are complete, and a Decision Document is expected to be issued by the State of Ohio before end of CY 2002. The principal contaminants of concern for the quadrant are trichloro ethene (TCE), uranium, and technetium.

This Level 6 Subproject will accomplish the DOE portion of the Environmental Restoration program for Quadrant II . Included in this scope of work is the remediation of release sites in accordance with DOE and regulatory requirements.

LOGIC RELATIONSHIPS

This subproject contains inter-project relationships with Sitewide Assessments (05.01.01.01), PORTS Environmental Monitoring (05.02.01.01), PORTS Post Remediation S&M (05.02.01.02), and DOE Prime Waste Treatment/Disposal (09.01.02.21-23). The Quadrant II Corrective Alternative Study/Corrective Measures Study (CAS/CMS) and Decision Document in the Sitewide Assessments subproject must be completed prior to the start of remediation activities. Remediation must be completed before performance monitoring, surveillance and maintenance, and waste treatment/disposal can commence.

Long-term S&M and Routine S&M activities are separated in the LCB so that base operations decline and long-term stewardship increases over time. This separation of long term S&M also assists in estimating the liability remaining following remediation. All S&M activities necessary following remediation, e.g. surveillance, maintenance, monitoring, operations of treatment facilities, repair and replacement are included in long-term S&M. DOE Order 413.3 also requires this distinction between routine and long-term S&M.

SCOPE DESCRIPTION

RELEASE SITES AND FACILITIES

Assessments to be completed:

None, all assessments activities will performed in Sitewide Assessments, WBS 05.01.01.01

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12. ELEMENT TASK DESCRIPTION (Continued)

2206 X-701B Holding Pond and Retention Basin Soils
2208 X-701C Neutralization Pit Soils
2217 X-720 Neutralization Pit Soils

To implement the required scope on the Quadrant II Decision Document the subproject has been broken out into the following Level 7 WBS elements:

Project Planning and Support (initiated in FY03)
X-701B Cap Remedial Action (initiated in FY07)
X-720 Soils (FY02 Carryover)
X-701B Extraction Well Mods (FY02 Carryover)
X-747G Storage Yard Removal (initiated in FY03)
X-701C RCRA Closure (FY02 Carryover)
X-701B DNAPL in LPM (FY02 Carryover)
X-701B Oxidant Injection Remedial Action (initiated in FY03)
X-701B Phytoremediation Remedial Action (initiated in FY05)
X-701B Alternative Risk-Based Strategy (initiated in FY03)

PERFORMANCE INDICATORS:

The following Performance Indicators are applicable for FY 2003.

Initiate removal of material from X-747G Storage Yard (01/10/03)
Complete Risk-Based Alternative Cleanup Strategy document for X-701B (12/30/03)
Complete removal of material from X-747G Storage Yard (09/30/03)

PAST AND FUTURE ACCOMPLISHMENTS

Past Accomplishments

Completed X-720 Soils Risk Reduction
Completed X-701C Neutralization Pit RCRA Closure
Completed clean-up of the Accident Site of the X-701B Oxidant Injection Pilot Project
Prepared final report on effectiveness of Lance Permeation demonstration
Completed the X-701B Extraction Well Modifications
Completed closeout of the X-701B Steam Stripping Pilot Project

Future Accomplishments

Complete X-720 Soils Waste Disposition
Complete X-701B Extraction Well Mods Waste Disposition
Complete X-747G Storage Yard Removal and project closeout

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Complete Project execution plans (PEP) as required.

SCOPE

PROJECT PLANNING & SUPPORT (05.01.02.02.01)

This element will provide project level planning, oversight, support, project control, and reporting for all activities within this project. This includes, but is not limited to: Project Management, Subcontract Management, Health & Safety oversight, Quality oversight, technical support for development of project specific technical specifications, procurement activities, field oversight, computer equipment and supplies necessary for technical oversight, sampling and field investigations, support for the Life Cycle Baseline, other outyear budget submittals, and the following routine reports:

Monthly Technical Progress Report
Monthly Status Review
Quarterly Progress Report
Project Baseline Summary

In addition, the following will be accomplished.

Database maintenance will include P3 schedules, training database, PMCP, RAIMS, SPDRT, BPS, SQV.

All scope will be accomplished in a 6 Sigma fashion. Oversight Plans will be developed for each subproject and assessments conducted as approved in oversight plans and in accordance with BJC procedures and plans.

Development of random responses to DOE inquiries will be accomplished, and DOE will be provided schedules for all projects.

Development of configuration items list will be accomplished and maintained and reviewed prior to construction or maintenance activities in accordance with the Configuration Management Plan for PORTS through the Configuration Control Authority and Site Configuration Manager.

A project execution plan, which includes this scope, will be developed to communicate to the project team the scope, method of accomplishment, performance criteria, performance metrics and procurement strategy.

X-701B CAP REMEDIAL ACTION (05.01.02.02.02)

FY02 Carryover: Complete design through 95% (moved to FY07).

This element will design and Install a RCRA Subtitle C/D cap (approximately 5 acres) over the X-701B pond, sludge retention basins, and plateau area north of the retention basins.

Waste from the remedial action is expected to be minimal; however, whatever waste is generated will be containerized, characterized, packaged and shipped offsite for treatment/disposal.

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12. ELEMENT TASK DESCRIPTION (Continued)

FY02 Carryover: Treatment of waste. Complete transportation of waste to disposal facility.

X-701B EXTRACTION WELL MODS (05.01.02.02.05)

FY02 Carryover: Complete waste disposition activities, transportation of waste to disposal facility.

X-747G STORAGE YARD REMOVAL (05.01.02.02.07)

FY03 characterization activities have confirmed the presence of asbestos-containing materials (ACM) at the X-747G. These materials were not previously identified in the Quad II Description of Current Conditions (12/1990), the Quad II RCRA Facility Investigation, or the Quad II Cleanup Alternatives Study/Corrective Measures Study (CAS/CMS). Asbestos abatement activities are required to ensure containment of ACM during the disposal process. Wooden boxes containing ACM must be double wrapped, placed on wooden pallets, and strapped on the pallets prior to being placed in disposal containers. Increase in waste container volume required, from 32,500 cubic feet to 45,000 cubic feet, due to packaging requirements. This additional scope/change in method of accomplishment (if no asbestos were present, the extra packaging would not be required) greatly reduces the amount of waste which can be placed in each disposal container. Discussions regarding using scrap metal (not containing ACM) to fill remaining space within the same container as packaged ACM have concluded sharp edges on the metal could compromise the ACM packaging, causing potential threat to human health or the environment.

Addition of capital charge code FS2RL4W9 to collect cost of procurement of shear head for attachment to excessed trackhoe. BCWS transferred from size reduction activity.

FY02 Carryover: Material characterization/survey.

This element will characterize, sort, segregate, repackage, and remove for disposal all materials stored within and adjacent to the X-747G Storage Yard. In addition, the fence around the facility will be demolished. Design to support this effort is also included in the scope.

Waste from the action will be containerized, characterized, packaged and shipped offsite for treatment/disposal to Envirocare.

Complete project closeout.

X-701C RCRA CLOSURE (05.01.02.02.11)

Complete waste disposition activities: container re-packaging, shipment to treatment facility, treatment of waste, shipment for disposal.

DNAPL in LPM (05.01.02.02.14)

FY02 Carryover: Complete transportation of waste to disposal facility.

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system includes:

Oxidant injection and recirculation for those portions of the X-701B Plume which contain soluble TCE concentrations in excess of 1,000 mg/kg (high concentration area). This treatment area includes the suspected source area.

Additional soil and groundwater analysis are included to support the design, and evaluate and optimize the performance of the oxidant treatment system.

The oxidant injection and recirculation system is expected to include:

Installation of approximately 336 Gallia injection wells.

Installation of approximately 127 Gallia extraction wells.

Construction and operation of 4 relocateable groundwater treatment systems to treat extracted groundwater prior to re-injection. Each treatment system shall have a capacity of 30 gpm.

Waste from the remedial action will be containerized, characterized, packaged and shipped offsite for treatment/disposal.

Complete project closeout and the Operating and Maintenance Plan for the remedial action.

X-701B PHYTOREMEDIATION REMEDIAL ACTION (05.01.02.02.16)

This element will design and install approximately 180 hybrid poplar trees over approximately one-half acre near the existing X-701B Groundwater Interceptor Trench, and west of the gravel fog road.

The planting technique will be designed to meet the following requirements:

Trenching will be utilized to aid in the planting of the trees. The depth of the trenches will extend to slightly below the water table, approximately 5 ft below ground surface. Sand stacks to bedrock will not be required.

Soil amendments, consisting of sand, fertilizer, lime, and peat moss will be mixed with the soils in each trench to aid in tree growth.

Minimal waste from the action will be containerized, characterized, packaged and shipped offsite for treatment/disposal to Envirocare.

Complete project closeout and the Operating and Maintenance Plan for the remedial action.

X-701B ELECTRICAL RESISTANCE HEATING (ERH) REMEDIAL ACTION (05.01.02.02.17)

Preliminary Electrical Resistance Heating conceptual design activities completed prior to decision to delete scope.

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SAFETY AND HEALTH WORK PERFORMANCE

It is the core value of Bechtel Jacobs Company that the safety and health of every worker, the public at large, and our environment, are the most important assets we are entrusted to protect. To accomplish this, an Integrated Safety Management System (ISMS), based on DOE's DEAR 970, has been implemented that incorporates the five core functions and is based on the seven guiding principles. The objective of ISMS is to integrate safety and environmental protection into the planning and execution of all work activities. The term safety encompasses Nuclear Safety, Industrial Safety, Industrial Hygiene, Occupational Health, Health Physics, and environmental protection. ISMS requirements flow-down to Bechtel Jacobs Company subcontractors. The Five Core Functions are: (1) Define the scope of work, (2) Analyze hazards, (3) Develop and implement hazard controls, (4) Perform work within controls, and (5) Provide feedback and continuous improvement. The Seven Guiding Principles are (1) Line Management Responsibility for Safety, (2) Clear Roles and Responsibilities, (3) Competence commensurate with responsibility, (4) Balanced Priorities, (5) Identification of Safety Standards and Requirements, (6) Hazard Control Tailored to Work Being Performed, and (7) Operations Authorization.

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REQUIREMENTS/DRIVERS

Bechtel Jacobs Company LLC Contract DE-AC05-98OR22700, December 18, 1997

Integrated Safety Management System Description, BJC-GM-1400, Revision 2, October 2001, and Integrated Safety Management System Supplement, BJC-GM-1401, Revision 0, December 2000

RCRA Part B Permit
Administrative Order by Consent
Ohio Consent Decree
Director's Findings & Orders for Integrated Units
Ohio Administrative Code 3745-54 through 3745-55 and 3745-29.
40 CFR 761
Applicable DOE Orders

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Bechtel Jacobs Company LLC Contract DE-AC05-98OR22700, December 18, 1997

Integrated Safety Management System Description, BJC-GM-1400, Revision 2, October 2001, and ISMS Supplement, BJC-GM-1401, Revision 0, December 2000.

WASTE VOLUMES

Please see attached waste performance metrics, as applicable.

PROJECT SCHEDULE

Please see attached project summary schedule, project detail schedule, and Milestone Status Summary Report.

EXECUTION YEAR BASELINE

Please see attached Budgeted Cost of Work Scheduled Plan.

BASELINE BY YEAR

Please see attached Baseline by Year Report.